BRUHATH BANGALORE MAHANAGARA PALIKE,

Name of Work: Providing and Laying PVC pipe line for water supply in Abbigere Medarahalli and KG Halli in ward No.12, Shettyhalli Sub Division.

ob Code- 012-20-000116 **Pcode: P1802** ***Est Cost Rs 35.00 Lakhs***

l No	Description	Unit	Nos	L	B	D	Qty.	Rate	Amount
1	Geophysical survey geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the hand pumps, MWS or PWSS by vertical electrical sounding by adopting venner or schlumbergers's method including recconnaisance suevey of geological formation Geophysical investigation of existing ground Water in the vicinity. its quality , quality & acceptabality of the users indicating the location of the site recommendeddepth of casing pipe required to seal the tope unconsolidated formation including an extra depth 1.0 metre in consolidated formation for aquire proposed to be tapped propable yield and other information required including transportation of instrument and accessories to work site, engating technical personal and labour etc., (PRE- Bangalore Circle-2014-15 Page No-47 & 48 , Item No-9.4)								
		Each	1				1.00	3768.00	**3768.00**
2	Sinking of Borewell of 165 mm clear using fast hydraulic rig of capacity 250 PSIG & above 900 CMF & abpve in al strata including over burden upto 22 m fixing of casing pipes, collars and cap with necessary cutting and threading including transporation of rig and surpporting vehicles, screws charges and cost of consumable including yield testing at the final depth with a minimum working of compressor for one hour all as specified., (PRE- Bangalore Circle-2014-15, Page No-46, Item No-9.1.1 to 9.1.7)								
	0.00 to 50.00 mtrs	Rmtr	1	50.00			50.00	347.00	**17350.00**
	50mtr to 100.00 mtr		1	50.00			50.00	442.00	**22100.00**
	100.00 to 150.00 mtr		1	50.00			50.00	456.00	**22800.00**
	150.00 to 200.00 mtr		1	50.00			50.00	536.00	**26800.00**
	200.00 to 250.00 mtr		1	50.00			50.00	634.00	**31700.00**
	250.00 to 300.00 mtr		1	50.00			50.00	700.00	**35000.00**
	300.00 to 350.00 mtr		1	50.00			50.00	825.00	**41250.00**
	350.00 to 400.00 Mtr		1	50.00			50.00	900.00	**45000.00**
3	Providing and Fixing 250mm dia PVC pipe and as per Specification and Direction (BWSSB SR 13-14, P.No.53, IT.No01 of Sl No.11)								
		Rmtr	1	18			198.00	2203.39	**436271.22**
4	Supply of ISI Mark 175mm Nominal bore ,plain end steel Casing pipe-grade of steel Fee 410 of wall thickness 5.4 mm thick confirming to IS 1387/1933 and manufactured by basic open hearth electric or basic oxygen process in random lenth of 5 to 7mtrs. Both ends threaded Confirming to IS 554/1985, One end fixed with a Socket Confirming to IS 4270:2001 and the other end with Screwed pipes . All pipes shall be reasonably free from defectes. The tube shall be reasonably straight should be with ISI marking, weighing 25.10kg/mtr. (Inclusive of all taxes) (PRED,2012-13 Page No.iii, item No-84)								

		Rmtr	1	50			550.00	1325.00	**728750.00**
5	Providing 175 mm dia **MS Collar** (RDED SR page ii, item86)								
		No	1	1			1.00		
							1.00	150.00	**150.00**
6	Providing 175 mm dia **MS Cap** (as per RDED SR page ii, item-85)								
		No	1	1			1.00	100.00	**100.00**
7	Providing Supplying to work site and fixing submersible pump sets of 150mm dia suitable for borewell and confirming to IS 8034:3phase SS Bowl & Impeller with Low Volt motor as per Specifications as per necessary ammendments and instructions of Engineer in charge of work. (RDWS SR Pag No.91 I No,12.02) a) Sl No-12.02.09(f)---17.5 HP/26 STG)								
		No	1	1			1.00	78348.00	**78348.00**
8	Supplying, laying, jointing testing and commissioning of GI pipes confirming to IS 1239:1990 with latest amendments, including fising collars, Elbows, Tees, bends, Glad Cocks and other Fittings (Excluding Cost of Specials) with Cuts and Threads wherever necessary including conveying the materials to workspot, including testing for water tightness with all lead and lifts etc complete (Contractor shall make his own arrangements for procuring water for testing) Class-C -Heavy 50mm Dia (RDWS SR 2019-20 Pg No.65 I No.10.04.03 (f))								
		Rmtr	1	300			300.00	463.00	**138900.00**
9	Suppy and fixing 50mm dia GI collar Heavy duty (PWD SR 2018-19 pg no. XLVII/2)								
		No	1	50.00			50.00		
							50.00	180.00	**9000.00**
10	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990.3C X 6.0Sq.mm (PWD ELECTRICAL SR 2019-20 P-07/I. NO 2.6.4								
		Rmtr	1	620			620.00	205.00	**127100.00**
11	Supply and fixing 50mm dia GI Union with ISI mark (PWD SR 2016-17 = P. No.XXXIX)								
		No	1	1.00	0.00		1.00	223.70	**224.00**
12	Supply and fixing 50mm dia GI Union with ISI mark (PWP & IWTD B.C. 2016-17 = P.No. XXXIX)								
		No	1	3.00			**3.00**	104.30	**312.90**
13	Supply and delivery at site of brand new best make non-return valve as per IS 778/1984 With ISI Mark and as per its latest amendments 50mm Dia (RDWS SR 2019-20Pg No 12.06 (a))								
		No	1	0			1.00	1175.00	**1175.00**
14	Supplying and fixing 50mm dia GI Elbow with ISI mark (PWD SR 2016-17 = P.No. XXXIX)								
		No	1	3			3.00	111.80	**335.40**

15	Supplying and delivery at site brand new star/Essen/Lotus/Sun-Shines/Adarsh/ G.K.Controls Best Indigenous make combined energy meter-cum-control panel board unit minimum mechanically strong suitable for operation on 3HP 50HZ 380/440 Volts AC supply with spring loaded latch locking Device with a key Ribbs should be provided. contron panal board unit suitable for operation on 3HP 50HZ 380/440 Volts AC shall be consists Etc. complete the panal board shall be fabricated in single unit in the above components panal board suitable pump set 10HP to 20HP with stae delta starter out door panel board up to 20HP (PWD SR. 2018-19 = P. No. XLVII/13)								
		No	1	0			1.00	21000.00	**21000.00**
16	Labour charges for Erection, Electrification and commissioning of Pump sets, including aligning and balancing of all items including supply and erection of two pair of supporting clamps, bore well caps, cable clips and water tight gland cable protectors, bolts, nuts, valve and gauges,tools and equipments etc., involved in the job as per specifications, with necessary tests as per specifications, with testing of as per instructions of engineer incharge of work.(RWDS SR Pg No.97 I No. 12.16)								
		Job	1				1.00	5650.00	**5650.00**
17	Labour charges for erection of outdoor type panel board and meter board units with all necessary materials and labour, tools and equipments including providing cement concrete foundation bed etc., complete as per specification, with testing of as per instructions of engineer incharge of work. (RWDS SR Pg No.97 I No. 12.18)								
		Job	1				1.00	1198.00	**1198.00**
18	Supplying of TPST with rewirable porcelain channels in SM enclosure 32 amps (Ele SR 2019-20 P-NO24/ I/NO 5.51)								
		No	1				1.00	1800.00	**1800.00**
19	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs crews.20"x20"x2.5" (Ele SR 2019-20 P-NO24/ I/NO 5.6.6)								
		No	1				1.00	292.00	**292.00**
20	Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 230/440v A.C. 50 Hz 12/24v D.C.(Ele SR 2019-20 P-NO29/ I/NO 5.38)								
		No	1				1.00	430.00	**430.00**
21	Supplying, fixing and wiring heavy duty low voltage capacitors conforming to IS 2834. 3 phase, 400/440 volts grade, for power factor improvement of rotating machineries like induction motor. 2KVAR (Ele SR 2019-20 P-NO29/ I/NO 5.37)								
		No	1				1.00	400.00	**400.00**
22	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 6 to 32amps (Ele SR 2019-20 P-NO27/ I/NO 5.17.7)								
		No	1				1.00	1715.00	**1715.00**

	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.00mm thick GI pipe 2.5 mtr long buried in a pit … The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia (Ele SR 2019-20 P-NO40/ I/NO 6.1)								
		No	1				1.00	2999.70	**3000.00**
24	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class 40mm dia (Ele SR 2019-20 P-NO41/ I/NO 6.9.1)								
		Rmt	1	4			4.00	335.00	**1340.00**
25	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975(Ele SR 2019-20 P-NO40/ I/NO 6.4.4)								
		Rmt	1	45			45.00	150.00	**6750.00**
26	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) cutting road surface in hard soil(Ele SR 2019-20 P-NO41/ I/NO 6.6.2)								
		Rmt	1	40			40.00	102.00	**4080.00**
27	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.6 sqmm to 16 sqmm. (Ele SR 2019-20 P-NO41/ I/NO 6.5.1)								
		Rmt	1	45			45.00	11.88	**535.00**
28	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.(Ele SR 2019-20 P-NO41/ I/NO 6.10.2)								
		No	1	3			3.00	270.00	**810.00**
29	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.(Ele SR 2019-20 P-NO24/ I/NO 5.7.2)								
		No	1	3.00			3.00		
							3.00	174.00	**522.00**
30	Cutting of road surface for pipeline trenches and disposing of the excavated stuff as directed including barricading, danger lighting etc. in the following classification.(RDWS SR 2019-20Pg No.08 I.No.2.26)Cutting Asphalt Road Surface(RDWS SR 2019-20Pg No.08 I.No.2.26.2)								
		Cum	1	60.00	0.60	0.15	5.40		
							5.40	542.00	**2927.00**
31	Cutting of road surface for pipeline trenches and disposing of the excavated stuff as directed including barricading, danger lighting etc. in the following classification.(RDWS SR 2019-20Pg No.08 I.No.2.26)Cutting in cement concrete road Surface(RDWS SR 2019-20Pg No.08 I.No.2.26.3)								
		Cum	1	25.00	0.60	0.15	2.25		
							2.25	1106.00	**2488.50**

	Earthwork excavation for pipeline trenches including depositing on bank upto a lead of 50 mtrs and depth up to 2.00 mtrs. Including shoring and strutting, danger lighting and using sight rails and boning rods at every 100 mtrs. Wherever necessary as directed in the following strata. (Manual Means) in ordinary soil (RDWS SR 2019-20Pg No.07								
		Cum	1	4518	0.60	0.75	2033.10	262.00	532672.00
33	Providing and installing at site of work P.V.C. pipes including cost of pipes and specials and labour, including lowering into trenches, laying true to line, level and perfect linking at joints leak proof including jointing of approved type with all labour charges and all lift charges, handling charges including encasing the pipe around to a depth not less than 15 cms with gravel or selected earth available from the excavation etc. complete. (RDWS SR 2019-20Pg No.62 I.No.10.01.1)(a) 63mm dia 6kg/cm2 (RDWS SR 2019-20Pg No.62 I.No.10.01.2)(a)								
		Rmt	1	4518			4518.00	155.00	700290.00
34	Refilling the basement and pipeline trenches with selected available earth from trench excavation including watering, Consolidation in layers of 15 cm thick including disposing of the surplus earth with all lead & lifts. (Compacting with vibro roller) (RDWS SR 2019-20 Pg No.08 I.No.2.25)								
		Cum					262.00	103.00	26986.00
35	Supply and delivery at site of brand new best make gate valve as per IS 778/1984 with ISI Mark and as per its latest amendments (RDWS SR 2019-20Pg No.95.I.12.05) a) 50mm dia								
		each					20.00	1190.00	23800.00
36	Bescom charges								
		each	1				1.00	19500.00	19500.00
	TOTAL							**Sub Total**	3124620.02
37	GST Charge 12%								374954.40
38	Miscellaneous and Unforeseen charges								425.58
	NETT TOTAL							**TOTAL**	3500000.00

(Rupees Thirty Five Lakhs Only)

CERTIFICATE:-

1 The Work spot has been inspected and the work is found to be necessary
2 The Estimate is prepared as per the PWD SR 2018-19, RDWS SR-2019-20 & BWSSB SR 13-14, Electrical SR 2019-20
3 The Provision made in estimate are adequate and essential.
4 This area comes under BBMP limits.

Assistant Engineer
Ward-12
BBMP, Bangalore

Asst. Exeutive Engineer
Shettyhalli Sub-division
BBMP, Bangalore

Executive Engineer
Dasarahalli division
BBMP, Bangalore

ADMINISTRATIVELY SANCTIONED FOR
(Rupees Thirty five Lakhs (35.00 Lakhs) only
Under the Head of Account P-1802
Water Supply
Registered as no EE(D.D.)/AS...129... Subject to conditions contained in Enclosed Memo
No. 129/2020-21 Dt. 02/12/2020

Exe. Eng
(DASARAHALLI) BBMP

JE/AE.

Technically Sanctioned for Rs. 100.00 Lakh.
Rs. In Words One Hundred Lakhs Only
Under P-1802,
Job Code No.
Registered as SE No. subject
to conditions contained in Enclosed Memo
No.

AE JE TA

SE (D) 2/12